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Chapter 5 – Plan Implementation and Monitoring

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5.1 INTRODUCTION

The success of the Snake River Birds of Prey National Conservation Area (NCA) resource management plan (RMP) will be measured by the degree to which it is implemented and the degree to which the Desired Future Conditions (DFC) are met. This chapter provides a framework to implement and monitor the various components of the preferred alternative described in Chapter 3 through an adaptive management process.

5.2 ADAPTIVE MANAGEMENT

The complexity and interconnectedness of natural processes and resource uses makes it impossible to completely understand all the components that make up the NCA and how they interact. Not only is our knowledge incomplete, but the systems themselves are constantly changing through both natural and human caused mechanisms. A dynamic planning process allows managers to apply new knowledge and understanding of processes to address these unknowns. Adaptive management is a continual process of planning, implementation, monitoring, and evaluation/assessment to adjust management strategies (Figure 5.1). Using the best available data, scientific information, and professional judgment, adaptive

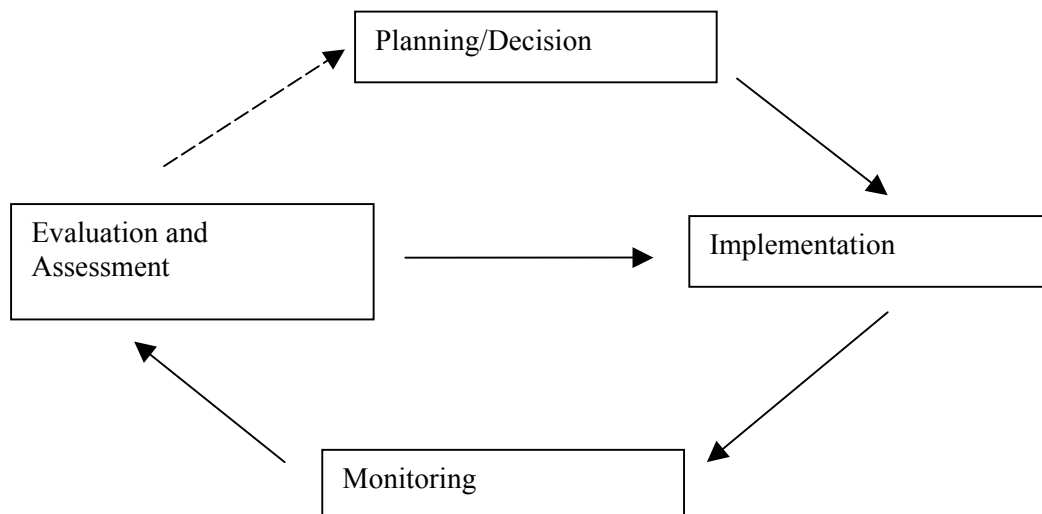
management allows managers to meet DFC and objectives by adjusting management throughout the life of the plan. Adaptive management improves the effectiveness of the plan by permitting dynamic responses to new data, changes in public expectations/desires, and a changing landscape.

5.3 IMPLEMENTATION

Implementation is the process of putting plans and decisions into effect. Following the adoption of the RMP, many of the actions identified will require implementation plans such as the designation of routes within areas identified as limited to designated routes, or a management plan for a Special Recreation Management Area (SRMA). These plans will provide the site specific management emphasis necessary to fully achieve the RMP objectives for that area.

In implementing this plan, BLM would focus its resources on the highest priority issues determined to have the greatest significance in meeting the needs of raptor and raptor prey populations. Other issues would be deferred until priority programs and projects are implemented. In setting priorities the following factors would be evaluated:

Figure 5.1 The Adaptive Management Process.



- Is this a primary purpose for the NCA?
- What geographic area would show the greatest return for the time and money invested?
- Will the project benefit special resource values, such as SSP or cultural resources?
- Does monitoring show we are making progress toward achieving the DFC?

Implementation decisions represent the final approval of the ground actions needed to implement the decisions identified in the RMP. These types of decisions generally require site-specific planning and NEPA analysis. The following are examples of implementation:

- *Fire Management* – Site specific fire and fuels management practices that are needed to meet the RMP decision to increase the number of acres receiving fuels treatments.
- *Lands and Realty* – Ensuring that authorized realty actions occurring in avoidance areas are consistent with the protection of the identified sensitive resource(s).
- *Livestock Grazing* – Identifying allotment-specific grazing management practices for lands designated as open for livestock grazing.
- *Recreation* – Developing SRMA management plans
- *Transportation* – Designating the travel management network for all areas identified as limited to designated routes in the RMP.

The rate of implementation and overall management would be guided by budget allocations and would be developed in consultation with other agencies, Tribes, government entities, and collaborators. Specific priorities would be further refined during development and NEPA analyses of implementation and project plans. Priorities would be reviewed annually to help develop the work plan commitments for the coming years and would be driven in part, by our success in making progress toward achieving the DFC.

5.4 MONITORING

RMP monitoring differs from activity or program specific monitoring in that it looks at progress on a landscape basis and focuses on trends in achieving objectives that will move closer to the DFC. Monitoring would focus on the how the plan is implemented (implementation monitoring) and the effectiveness of the actions implemented (effectiveness monitoring). Although some program specific monitoring currently occurs (i.e., livestock utilization, traffic counters), a comprehensive monitoring plan will be developed to insure adequate progress toward the goals and objectives for the selected alternative.

Implementation monitoring would record what, when, where, and how the plan has been followed, including legal requirements and agency policies. Implementation monitoring would occur at one-year intervals and would provide a basis for annual budgeting.

Effectiveness monitoring would focus primarily on vegetation resources (for DFC) and secondarily on other resources (for objectives). Most resources and resource uses depend on the type and ecological condition of existing vegetation communities. The DFC generally call for maintaining or increasing the amount of perennial grass and shrub cover. Effectiveness monitoring would focus on short- and long-term landscape-wide changes to perennial vegetation cover (Table 5.1). Key indicators would include the amount of:

- shrub or perennial grass dominated communities that are converted to annual dominated communities by fire or failed vegetation treatments (desirable vegetation lost);
- perennial grass/shrub or to a lesser degree, perennial grass communities (desirable vegetation) present; and
- connectivity between desirable vegetation communities (degree of fragmentation).



Table 5.1. Landscape-level Measures of the Effectiveness of Implementing the NCA RMP. Changes in these Indicators Would Help Determine Progress Toward Meeting DFC.

Indicator	Management Area (BLM acres)	Current	10-year	20-year	Trigger(s)
Desirable Vegetation Lost	Entire NCA		<15,000 acres	<30,000 acres	Loss of >7,500 acres in a 5-year period
Desirable Vegetation Present ¹	Entire NCA (476,600) ²	39	46	58	Failure of >20% of treatments over a 5-year period.
	NCA outside the OTA (341,600)	42	52	66	
	1 (96,700)	66	75	90	
	2 (190,800)	35	45	60	
	3 (54,100)	30	35	45	
	OTA (134,900)	32	32	39	Loss of 10% in 10 years
Degree of fragmentation	1	Moderate	Moderate	Low	Increase in the expected level of fragmentation.
	2	Moderate to High	Moderate	Moderate to Low	
	3	High	High	Moderate	
	OTA	Low to High	Low to High	Low to High	

¹ Expressed as a percentage of the area.

² Total of the following general vegetation classifications: shrub/cheatgrass, cheatgrass, exotic annuals, Sandberg bluegrass/cheatgrass, shrubs, seeded, and bare ground.

Although 230,000 acres of vegetation treatments would occur in the preferred alternative, the 10- and 20-year projected values for desirable vegetation present account for funding problems or unforeseen catastrophic events (i.e., fire, drought).

Monitoring intervals would vary because of different responses to treatments or disturbances. Fire would result in the immediate conversion of shrublands to grasslands; therefore, changes can be monitored on a yearly basis. However, because fire conditions vary considerably between years, the trigger for change would occur at a longer interval. Establishing perennial grass and shrub communities through vegetation treatments would occur at a slower rate; therefore, changes from fuels and restoration treatments could be expected

to be measurable at five-year intervals. Increasing the size and connectivity of perennial communities would occur over the long-term, and measurable changes could be expected at 10- or 20-year intervals.

The triggers are meant as guidelines and could change as inventory, research, and experience indicate.

Objectives to be monitored are organized by resource or resource use (Table 5.2). Monitoring is intended to identify broad trends that indicate improvements or changes that need to be addressed and is not intended to be site specific or address all objectives, activities, and resources. The objectives listed generally follow those identified in Chapter 3; however, some have been paraphrased or combined



where appropriate. They are listed under the resource most directly affected by the action.

Monitoring of key elements of the plan does not constitute a BLM decision, but merely provides the basis for adaptive management.

Monitoring would be implemented over a period of years, and would be conducted in a cost-effective manner, often using data currently collected for other purposes, such as rangeland trend data. Monitoring may also

include sampling, modeling, or remote sensing to analyze landscape-wide progress. Monitoring methods would follow BLM or other appropriate protocols.

The monitoring program would not be static, but would be periodically evaluated and adjusted as appropriate to ensure that the monitoring questions and standards remain relevant. As part of regular plan maintenance, some monitoring items could be discontinued and others added as knowledge and issues change.

Table 5.2. Landscape-level Measures of the Effectiveness of Implementing the Snake River Birds of Prey National Conservation Area RMP. Changes in these Indicators Would Help Determine if Objectives are Being Met.

Cultural	Objective	<i>Manage cultural resources by emphasizing mitigation and public interpretation.</i>	Indicator/Trigger for Adaptive Management
	Monitoring Method and Frequency	Monitor a representative sample of significant cultural sites at least once every three years (1-3 year). Create a mitigation plan based on the results of the monitoring. Monitor the Guffey Butte – Black Butte Archaeological District and the Oregon Trail for recreation, OHV, fire suppression, and rehabilitation/restoration impacts (annually).	Impacts to cultural resources that detract from the characteristics that make a site eligible for the National Register.
Fish and Wildlife	Objective	<i>Emphasize protection and enhancement of raptor prey and other wildlife populations and habitats and expand areas useable by raptor prey and big game.</i>	Indicator/Trigger for Adaptive Management
	Monitoring Method and Frequency	Monitor prey populations to determine whether treated and untreated vegetation communities are meeting the needs of raptor prey species, especially Piute ground squirrel and black-tailed jackrabbits (1-3 years). Use monitoring data provided by IDF&G (1-5 year intervals) for waterfowl, upland game, and big game species to identify population trends. Monitor the colonization of successfully rehabilitated and restored uplands by representative wildlife species beginning 15 years after treatment.	Consistent downward trends or persistent instability in populations.



Table 5.2. Landscape-level Measures of the Effectiveness of Implementing the Snake River Birds of Prey National Conservation Area RMP. Changes in these Indicators Would Help Determine if Objectives are Being Met.

Special Status Animals	Objective	<i>Emphasize maintenance, protection, and enhancement of raptors and other sensitive wildlife populations and habitats.</i>	Indicator/Trigger for Adaptive Management
	Monitoring Method and Frequency	Monitor representative select sensitive species (avian, mammalian, aquatic) in representative habitats (1-3 year intervals). Monitor the colonization of successfully rehabilitated and restored riparian/wetlands by representative special status species beginning 15 years after treatment 1-3 year intervals).	Consistent downward trends or persistent instability in populations.
Special Status Plants	Objectives	<i>The distribution, abundance, and vigor of special status plants would be maintained or improved.</i>	Indicator/Trigger for Adaptive Management
	Monitoring Method and Frequency	Monitor select populations of Type 1 and 2 special status plants for disturbance from livestock trampling and grazing, OHV activity, fire (suppression and ESR activities), and exotic plant invasion (1-5-year intervals). Slickspot peppergrass occurrences would be monitored annually using the habitat integrity protocol (as described in the CCA).	For slickspot peppergrass, 10% surface disturbance on 10% of slickspots on a transect would trigger a management change. Other species do not have specific triggers.
Vegetation	Objectives	<i>Watersheds would have stable vegetative communities that provide for proper hydrologic function, nutrient cycling, energy flow, and soil stability.</i> <i>Limit further loss of existing native shrub habitat to no more than 30,000 acres and increase the acres of restored shrub habitat.</i>	Indicator/Trigger for Adaptive Management



Table 5.2. Landscape-level Measures of the Effectiveness of Implementing the Snake River Birds of Prey National Conservation Area RMP. Changes in these Indicators Would Help Determine if Objectives are Being Met.

	Monitoring Method and Frequency	Use satellite imagery to monitor landscape changes in desired plant communities related to fire, recreation, livestock grazing, military training, and other activities to assess potential impacts to raptor prey species (5-year intervals) Monitor livestock utilization following use periods. Vegetation trend monitoring in the OTA Monitor condition, viability, and effectiveness of fuel breaks (annually).	Greater than expected loss of perennial vegetation communities.
Recreation	Objective	<i>Provide a diversity of quality, resource based recreational opportunities, while protecting resource values, minimizing user conflicts, and promoting public safety.</i>	Limits of Acceptable Change (LAC) thresholds are exceeded.
	Monitoring Method and Frequency	Obtain visitor use estimates from other State agencies (e.g. IDF&G, IDP&R) and private entities (e.g. Idaho Power Company) (annually). Evaluate other monitoring data (vegetation, wildlife) to determine if resource values are being adequately protected.	

5.5 EVALUATION AND ASSESSMENT – FUTURE CHANGES TO THE RMP

Evaluation and assessment is the point where plans and monitoring data are reviewed. This phase of adaptive management is used to: 1) judge the success of existing actions in meeting objectives and making progress toward achieving DFC; 2) make recommendations for mid-course corrections; and 3) help set priorities for management and research. The understanding gained through a comprehensive review of all the monitoring data is critical to managing sustainable, healthy, and productive habitats.

Evaluation and assessment would occur at five-year intervals. Tables 5.1 and 5.2 identify

indicators or triggers (conditions that reflect a movement away from DFC) that may indicate a need to change or adjust management. Results from program specific monitoring could provide additional indicators for change. Conditions that might warrant a change in the RMP include:

- New information or circumstances that provide for interpretations not known or understood when the RMP was completed that could significantly affect ongoing actions.
- RMP decisions that are no longer valid based on new information or changed circumstances.



- Implementation decisions that are no longer valid based on new information or changed circumstances.
- Effects of proposed or ongoing actions that are substantially different than those projected in the Environmental Impact Statement (EIS).
- Inconsistencies that arise between RMP actions and other resource-related plans.

Minor changes, refinements, or clarifications in the plan are maintenance actions that incorporate data from monitoring. Plan maintenance actions would not expand the scope of resource uses or restrictions or change the terms, conditions, or decisions of the approved NCA RMP/EIS. Maintenance actions do not require formal public involvement, Tribal con-

sultation, or interagency coordination. Major changes to the plan, however, would require a plan amendment, formal public involvement, interagency coordination, and Tribal consultation, and NEPA analysis.

5.6 COLLABORATION IN IMPLEMENTATION AND MONITORING

Although BLM has primary responsibility for management of the NCA, opportunities exist to work with a variety of cooperating entities (i.e. Idaho Army National Guard (IDARNG), U.S. Geological Survey's Biological Resource Division) during plan implementation and monitoring. For example, The IDARNG monitors vegetation plots annually to determine habitat trend. And provide information regarding the status of vegetation in the OTA.



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